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**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Implement the  
Commission's Procurement Incentive Framework and to  
Examine the Integration of Greenhouse Gas Emissions  
Standards into Procurement Policies.

Rulemaking 06-04-009  
(Filed April 13, 2006)

**California Energy Commission Docket #07-OIIP-01**

**OPENING COMMENTS OF THE NATURAL RESOURCES DEFENSE  
COUNCIL (NRDC) AND UNION OF CONCERNED SCIENTISTS (UCS)  
ON ALLOWANCE ALLOCATION ISSUES**

October 31, 2007

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**I. Introduction and Summary**

The Natural Resources Defense Council (NRDC) and Union of Concerned Scientists (UCS) respectfully submit these opening comments in accordance with the "Administrative Law Judge's Ruling Requesting Comments and Noticing Workshop on Allowance Allocation Issues" (ALJ Ruling), dated October 15, 2007, and in accordance with Rules 1.9 and 1.10 of the California Public Utilities Commission's (CPUC) Rules of Practice and Procedure. NRDC/UCS also concurrently submit these comments to the California Energy Commission (CEC) in Docket #07-OIIP-01, the CEC's sister proceeding to this CPUC proceeding.

NRDC is a non-profit membership organization with a long-standing interest in minimizing the societal costs of the reliable energy services that a healthy California economy needs. In this proceeding, NRDC represents its more than 124,000 California members' interest in receiving affordable energy services and reducing the environmental impact of California's energy consumption. UCS is a leading science-based non-profit working for a healthy environment and a safer world. Its Clean Energy Program examines the benefits and costs of the country's energy use and promotes energy solutions that are sustainable both environmentally and economically.

NRDC and UCS commend the two Commissions for their leadership in addressing global warming and reducing greenhouse gas (GHG) emissions through their decisions and actions over

the past several years. NRDC/UCS support the ALJ Ruling's focus on first starting with the basic principles and policy considerations for policymakers to decide how to handle allowance distribution; these are the threshold issues that the Commissions and the California Air Resources Board (CARB) must address now. These comments respond to the specific questions presented in the ALJ ruling and pertain only to the electricity and natural gas sectors, though of course CARB may also consider other sectors to be covered in a multi-sector cap-and-trade program. NRDC and UCS look forward to discussing these comments with other parties at the November 5, 2007 workshop. NRDC/UCS present in the response to question 28 their overall recommendation for how California should design a system whereby electricity and natural gas entities obtain emission allowances if a cap and trade system is adopted.

## **II. Responses to Questions in ALJ Ruling**

### **3.1. Evaluation Criteria**

- 1. Please comment on each of the criteria listed by the MAC. Are these criteria consistent with AB 32? Should other criteria be added, such as criteria specific to the electricity and/or natural gas sectors? In making trade-offs among the criteria, which criteria should receive the most weight and which the least weight?*
  - a. Reduces the cost of the program to consumers, especially low-income consumers,*
  - b. Avoids windfall profits where such profits could occur,*
  - c. Promotes investment in low-GHG technologies and fuels (including energy efficiency)*
  - d. Advances the state's broader environmental goals by ensuring that environmental benefits accrue to overburdened communities,*
  - e. Mitigates economic dislocation caused by competition from firms in uncapped jurisdictions,*
  - f. Avoids perverse incentives that discourage or penalize investments in low-GHG technologies and fuels (including energy efficiency),*
  - g. Provides transition assistance to displaced workers, and*
  - h. Helps to ensure market liquidity.*

NRDC/UCS believe that starting with a list of principles and important policy considerations is the appropriate way to address the key threshold issues surrounding allowance

distribution (i.e., allocation vs. auction, and distribution of auction revenues), and commend the Commissions for framing this request for comments in this manner.

Most importantly, *NRDC/UCS urge the Commissions to recommend that allowances be distributed in the public interest*, since allowances represent permission to use the atmosphere, a public good, to dispose of pollution. NRDC/UCS generally support the list of criteria identified by the Market Advisory Committee (MAC) to be used to analyze different option for emissions allowance distribution issues, and we believe that the list of criteria could be further improved and refined based on the guidelines in AB 32.

NRDC/UCS support the following list of principles that should be used in evaluating the general allocation options (free allocation or auction), *and* in evaluating distribution methods for *either* allocation of allowances or distribution of revenues raised through an auction.

NRDC/UCS support the following principles and believe that policymakers should strive to ensure that *all* of the following principles are met. The distribution of allowances and/or auction revenue should:

- Be equitable; (Health and Safety Code Section 38562(b)(1))
- Prevent the creation of large profits (or “windfall profits”) for businesses that are unrelated to actions to reduce GHG emissions; (MAC Report)
- Reduces the cost of the program to consumers, especially in low-income communities; (Health and Safety Code Section 38562(b)(2), MAC Report)
- Ensure fair treatment for “early actors” that have proactively reduced GHG emissions already, and ensure that emitters are appropriately motivated to make investments and to take early action that will reduce emissions; (Health and Safety Code Section 38562(b)(1), MAC Report)
- Promote investment in low-GHG technologies, including energy efficiency, to further the achievement of the maximum technologically feasible and cost-effective greenhouse gas emission reductions to contribute to meeting AB 32’s emission limit; (Health and Safety Code Section 38562(a), MAC Report)
- Contribute to the state’s efforts to improve air quality and reduce toxic air contaminant emissions; (Health and Safety Code Sections 38501(h), 38562(b)(4) and 38570 (b)(2), MAC Report)
- Contribute to the development of innovative and pioneering technologies; (Health and Safety Code Section 38501(e))

- Minimize costs and maximize the total benefits to California; (Health and Safety Code Section 38562(b)(1))
- Help improve and modernize California’s energy infrastructure and maintain electric system reliability; (Health and Safety Code Section 38501(h))
- Maximize additional environmental and economic co-benefits for California; and (Health and Safety Code Sections 38501(h) and 38570 (b)(3))
- Direct investment toward the most disadvantaged communities in California and provide an opportunity for small businesses, schools, affordable housing associations, and other community institutions to participate in and benefit from statewide efforts to reduce greenhouse gas emissions. (Health and Safety Code Section 38565)

### **3.2. Basic Options**

#### ***2. Broadly speaking, should emission allowances be auctioned or allocated?***

NRDC/UCS believe that under any regulatory approach, auction revenues or allowances should be distributed in the public interest and to further the purposes of AB 32. Since allowances are permits to emit greenhouse gases, they represent something of value. We urge the Commissions to recognize from the outset that allowances effectively can be thought of as money, and therefore the distribution of allowances and the distribution of auction revenue are both ways to distribute money and should be subject to the same criteria and viewed as essentially interchangeable (although auctions provide a more transparent means to distribute the value of the allowances).

In designing California’s allowance distribution mechanism, we urge the Commissions and other parties to consider both the best design for California’s own system, and how the state can set an effective precedent for a national system that will benefit all of California’s utility customers. In particular, while there are significant differences among California’s utilities that must be considered in designing California’s own system, the vast majority of California’s utilities have very low emissions relative to the rest of the country. Therefore it will be in all of California’s consumers’ best interest to set a precedent for, and to actively advocate for, a national system that distributes allowances in the public interest and that rewards cleaner regions. NRDC/UCS oppose “grandfathering” of allowances, that is, giving them away for free to emitters based on historical or current emissions, because it does not meet the principles listed above; moreover, any system that grandfathers allowances in California and thereby sets a

precedent for a federal system that grandfathers allowances would hurt all of California's utility customers.

The decision of whether to auction and distribute revenues or administratively allocate allowances should be made upon careful analysis of how the options would meet all of the principles that NRDC/UCS support above. We note that the point of regulation and the point of allocation need not be the same, although many parties implicitly assume that if allowances are allocated that they will be given to the regulated entities. The point of regulation will influence the choice of how to distribute allowances, but there may be multiple options that would meet the principles above under either a load-based or deliverer/first seller approach.

NRDC/UCS generally prefer auctioning 100% of allowances and using the proceeds to further the goals of AB 32 and to benefit consumers. Under a first-seller approach, allowances should be 100% auctioned to prevent windfall profits to generators and other first sellers at the expense of consumers. (Since many first-sellers are private companies that are not subject to cost-of-service regulation, giving allowances away for free would result in "windfall" profits to many of these companies. This is because first-sellers would raise their prices to reflect the "opportunity cost" of allowances, passing these costs onto consumers, even if they receive allowances for free. Studies have shown that the value of the free allowances received under administrative allocation would far exceed these sources' compliance costs, resulting in a windfall.<sup>1</sup>) Auctioning allowances would require first-sellers to pay for the right to pollute, and, if auction revenues are used for the purposes discussed in Question 8, below, this system would meet NRDC/UCS' principles outlined above.

Allowances could also be administratively allocated to electric and gas retail providers as trustees on behalf of their customers, under either a load-based or first seller point of regulation, since the potential for undue profits would be minimized (as the investor-owned utilities (IOUs) are economically regulated entities and the CPUC could (and should) prohibit from passing through the "opportunity cost" of allowances to customers, and the publicly-owned utilities (POUs), as public entities, do not have the profit motives of private companies). If allowances are allocated, the allocation method should be done on an output-based benchmarking basis

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<sup>1</sup> See, for example, the discussion in *Allocating Allowances in a Greenhouse Gas Trading System*, National Commission on Energy Policy staff paper, [www.energycommission.org/site/page.php?report=32](http://www.energycommission.org/site/page.php?report=32).

(adjusted for verified energy efficiency savings), a per-customer basis, or a combination of these two approaches, to meet the principles listed above.

**3. *If you recommend partial auctioning, what proportion should be auctioned? Should the percentage of auctioning change over time? If so, what factors should be used to design the transition toward more auctioning?***

If the state decides to administratively allocate allowances, it would still be beneficial to auction at least some portion of the allowances, in order to provide a simple mechanism for new entrants and to provide a transparent price signal. If the percentage of auctioning changes over time, policymakers should ensure that the key principles are still met.

**4. *How should new market entrants, such as energy service providers, community choice aggregators, or (deliverer/first seller system only) new importers, obtain emission allowances, i.e., through auctioning, administrative allocation, or some combination?***

The simplest mechanism to enable new market entrants to acquire allowances is through an auction. Under an administrative allocation scheme, new market entrants could either enter the market through a set-aside auction or “updating” the allocation over time (e.g. using the latest information on number of customers, or sales adjusted for verified energy efficiency savings). New entrants should be treated on an equal footing as incumbent entities. New entrants should be treated on an equal footing as incumbent entities. The allowance allocation method should be competitively neutral; in other words, it should not create perverse incentives for firms to either enter or exit the market.

### **3.3. Auctioning of Emission Allowances—General Questions**

**5. *What are the important policy considerations in the design of an auction?***

Elsewhere in these comments, we discuss the important policy considerations that would favor use of an auction to distribute allowances, as well as key policies that should be considered in distributing revenues raised through an auction. We believe these are the threshold policy issues that the Commissions and CARB must address now. Once these decisions are made, the state can turn to the issue of how best to design the auction itself.



To optimize the design of an auction, policymakers should analyze other public auctions, for example, frequency spectrum auctions and U.S. Treasury bill auctions, to identify lessons that can be learned and important policy considerations that would apply to an emissions allowance auction. NRDC/UCS have not undertaken such an analysis, and offers these preliminary suggestions; policymakers should design an auction to:

- ◆ Be as simple, easy to understand, and straightforward to participate in as possible;
- ◆ Minimize administrative costs;
- ◆ Be stable and predictable, and provide certainty for regulated entities and investors;
- ◆ Provide transparent information about the market (e.g., the price of allowances, which entities acquired how many allowances, etc.);
- ◆ Ensure that the revenues raised will go to the intended purposes; and
- ◆ Protect against market manipulation.

***6. How often should emission allowances be auctioned? How does the timing and frequency of auctions relate to the determination of a mandatory compliance period, if at all?***

Allowances should be auctioned frequently enough to maximize price transparency and market liquidity, while at the same time minimizing administrative burdens for the administrator and participants in the auction. Allowances should be auctioned at least annually, and preferably more frequently, such as quarterly. A recent report by the University of Virginia, Resources for the Future, and the California Institute of Technology recommends that the Northeast's Regional Greenhouse Gas Initiative (RGGI) hold quarterly auctions.<sup>2</sup> Auctions should be frequent enough to ensure that there are multiple auctions during each compliance period.

Allowances should be created in vintages for each year (to match that year's cap). At least some portion of allowances should be auctioned in advance of the vintage year that allowances will be eligible to be used for compliance, so that regulated entities can plan ahead. For example, at least a portion of 2016-year allowances should be auctioned in 2012, so that regulated entities have a sense of what the price and availability of allowances will be in 2016 and can make investments in emission reduction measures accordingly. This is particularly

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<sup>2</sup> Holt, C. et al. *Auction Design for Selling CO2 Emission Allowances Under the Regional Greenhouse Gas Initiative*. October 26, 2007.

important in the utility sectors, since some types of investments need several years of lead time to begin providing emission reductions.

***7. How should market power concerns be addressed in auction design? If emission allowances are auctioned, how would the administrators of such a program ensure that all market participants are participating in the program and acting in good faith?***

Regardless of the system the state uses to distribute allowances, it will need to be designed to avoid market power and market manipulation. These issues are not unique to auctions, although the techniques used to address the concerns will likely vary based on the allowance distribution system. Once the state decides to use an auction, policymakers should study how other auctions of public assets have been designed to address market power concerns, and implement the best practices.

While we believe that auctions must be designed to avoid market manipulation as we noted above, and we understand some parties' significant concerns, particularly in the context of the state's negative experiences in the restructuring of the electricity market, we are less concerned that an allowance auction will experience the same difficulties. In particular, unlike electricity—which has inelastic demand, cannot be stored (in any significant quantities), and was being bought and sold almost exclusively in day-ahead and hour-ahead markets during the electricity crisis—an allowance auction system retains a significantly greater degree of inherent flexibility. First, the compliance period for allowances will likely be no shorter than one year and may be a multi-year compliance period, providing inherent flexibility within that time period. Second, the “demand” for allowances is relatively elastic as the regulated entities will have numerous options for reducing emissions. And third, if regulated entities are allowed to bank allowances, then they can be stored over time. Although these factors alleviate concerns about repeating the state's mistakes in the electricity markets, any allowance distribution system must still be carefully designed to ensure that the market cannot be manipulated.

***8. What criteria should be used to designate the types of expenditures that could be made with auction revenues (including use to reduce end user rates), and the distribution of money within those categories?***

In their recommendations to CARB, the Commissions should be clear that ***an overriding principle should be to distribute the allowance value (whether auction revenues or the***

*allowances themselves) in the public interest and to further the goals of AB 32.* The law provides specific guidance on its goals, as well as specific requirements for program design. The criteria for designating the use of auction revenues should reflect the law’s guidelines; policymakers should consider whether the use of auction revenue will:

- Be equitable; (Health and Safety Code Section 38562(b)(1))
- Prevent the creation of large profits (or “windfall profits”) for businesses that are unrelated to actions to reduce GHG emissions; (MAC Report)
- Reduces the cost of the program to consumers, especially in low-income communities; (Health and Safety Code Section 38562(b)(2), MAC Report)
- Ensure fair treatment for “early actors” that have proactively reduced GHG emissions already, and ensure that emitters are appropriately motivated to make investments and to take early action that will reduce emissions; (Health and Safety Code Section 38562(b)(1), MAC Report)
- Promote investment in low-GHG technologies, including energy efficiency, to further the achievement of the maximum technologically feasible and cost-effective greenhouse gas emission reductions to contribute to meeting AB 32’s emission limit; (Health and Safety Code Section 38562(a), MAC Report)
- Contribute to the state’s efforts to improve air quality and reduce toxic air contaminant emissions; (Health and Safety Code Sections 38501(h), 38562(b)(4) and 38570 (b)(2), MAC Report)
- Contribute to the development of innovative and pioneering technologies; (Health and Safety Code Section 38501(e))
- Minimize costs and maximize the total benefits to California; (Health and Safety Code Section 38562(b)(1))
- Help improve and modernize California’s energy infrastructure and maintain electric system reliability; (Health and Safety Code Section 38501(h))
- Maximize additional environmental and economic co-benefits for California; and (Health and Safety Code Sections 38501(h) and 38570 (b)(3))
- Direct investment toward the most disadvantaged communities in California and provide an opportunity for small businesses, schools, affordable housing associations, and other community institutions to participate in and benefit from statewide efforts to reduce greenhouse gas emissions. (Health and Safety Code Section 38565)

Based on these principles, NRDC/UCS believe that appropriate uses of auction revenues would include distributing the funds to:

- ◆ Support investments in, and deployment of, technologies to reduce GHG emissions;
- ◆ Reduce costs to consumers, particularly low-income consumers, for example through investments in end-use efficiency beyond the state's existing programs (in particular, some auction revenues could be used to help supplement existing funding for low-income energy efficiency and bill assistance programs);
- ◆ Invest in RD&D of new technologies to reduce GHG emissions;
- ◆ Support air and toxic pollution reduction efforts and enforcement programs, particularly in environmental justice communities;
- ◆ Support development of "green collar" jobs; and
- ◆ Provide economic opportunities to low-income and disadvantaged communities, as well as small businesses, schools, affordable housing associations, and other community institutions.

Under a load-based point of regulation for electricity and/or natural gas, another system that meets the principles expressed above is to auction all allowances, but to allow utilities to keep a portion of the amount they spend in the auction to invest in specified ways, subject to oversight and verification that the investments meet appropriate criteria. For example, utilities could use the funds that might have otherwise been subsumed in the state's overall auction revenues to make long-term investments in greenhouse gas reduction measures, to invest in RD&D, to invest in end-use efficiency beyond the state's existing programs, and to lower costs for low-income customers (through supplementing existing funding for low-income energy efficiency and bill assistance programs). The remaining auction revenue would be invested in the remaining areas described above.

***9. What type of administrative structure should be used for the auction? Should the auction be run by the State or some other independent entity, such as the nonprofit organization being established by the Regional Greenhouse Gas Initiative?***

The state should use a single entity statewide to administer the auctions. This auction administrator should be selected based on considerations including its:

- ◆ ability to be efficient and to operate with low administrative costs;
- ◆ expertise in auction design and administration;
- ◆ ability to ensure that the auction revenues will go to the intended purposes and not be transferred to investments that do not meet the requirements of AB 32; and
- ◆ transparency and public confidence in its operations.

If other states in the Western Climate Initiative adopt mandatory, enforceable caps with a comparably stringent program design as California's, and CARB determines that it is in the state's interest to link with the other states, it may be advantageous to have single regional entity administer the auction similar to the administrative structure being established by RGGI.

### **3.4. Electricity Sector**

#### **3.4.1. Administrative Allocation of Emission Allowances**

***10. If some or all allowances are allocated administratively, which of the above method or methods should be used for the initial allocations? If you prefer an option other than one of those listed above, describe your preferred method in detail. In addition to your recommendation, comment on the pros and cons of each method listed above, especially regarding the impact on market performance, prices, costs to customers, distributional consequences, and effect on new entrants?***

If allowances are allocated administratively, NRDC/UCS support the use of an updating per-customer allocation, or an updating output-based benchmarking method with adjustments for verified energy efficiency savings, or a combination of the two. Both approaches would meet the principles discussed above, and are flexible enough to account for changes among retail providers over time (e.g. load migration, weather patterns).

The ALJ Ruling requests comments on the pros and cons of grandfathering, benchmarking, updating, and other allowance allocation methods. We address each of these options below. The ALJ Ruling also requests comments on each of these options under a load-based and a first seller point of regulation; under either point of regulation, if allowances are allocated for free NRDC/UCS recommend that they be allocated to retail providers as trustees on behalf of their customers (to avoid the windfall profits that would arise if allowances are freely allocated to first sellers), therefore we do not address different points of regulation in the subsections below.

#### **Grandfathering**

Allowances should not be allocated through grandfathering. In essence, grandfathering essentially obligates each regulated entity to reduce its emissions by the same percentage. This is seriously problematic, because grandfathering fails to recognize and reward those entities that

have taken early action to reduce GHG emissions, and at the same time, grandfathering rewards entities with high historical emissions. This creates a dangerous precedent for future policies (by encouraging emitters to increase emissions and not to take voluntary early action in advance of a regulation to build up their “baseline” and benefit from more allowances). In addition, it would create a very poor precedent for a federal program; a federal program that grandfathers allowances would severely disadvantage California utility customers due to the relatively low average GHG emissions intensity of the state’s electricity sector.

NRDC/UCS urge the Commissions to clearly and forcefully recommend that CARB not grandfather allowances. An early policy statement from CARB that it will not grandfather allowances is also essential to enable and promote voluntary early action between now and the start of the program in 2012 to reduce emissions.

### *Benchmarking*

A benchmarking or output-based approach essentially asks each regulated entity to reduce emissions to the same level of emissions intensity; in other words, its premise is that every kWh of electricity or therm of natural gas sold should be allowed the same level of GHG emissions. This approach rewards the retail providers that already have a clean resource mix, and recognizes early action that they have already taken.

A simple example of how this method might be employed under a load-based point of regulation follows:

- Cap is set at 100 metric tons, so there are 100 allowances to distribute
  - 2 utilities, each with current emissions of 1 metric ton/MWh
  - Utility A has 50 MWh of load and has reduced its load by 10 MWh of verified savings from efficiency programs
  - Utility B has 60 MWh of load and has not reduced its load with efficiency programs.
- 
- Total load (including verified efficiency savings) = 120 MWh
  - Output-based benchmark =  $100 \text{ tons} / 120 \text{ MWh} = 0.83 \text{ ton/MWh}$
  - Utility A therefore receives 50 allowances, and utility B receives 50 allowances. Utility A does not have to purchase additional allowances or make additional reductions in this compliance period because of its verified efficiency savings; Utility B is short 10 allowances.

An output-based benchmarking approach must be adjusted to account for verified energy savings in order to encourage retail provider investments in energy efficiency. Otherwise any energy efficiency savings that a retail provider obtains would cause it to receive fewer allowances, thus discouraging future investments in efficiency savings. If an output-based benchmarking approach is used, the Commissions would need to determine the appropriate historical year to start counting verified energy efficiency savings to adjust the retail providers' current load.

### Updating

Updating is not an allocation method itself; instead, updating can be used in conjunction with other allocation methods. Under an updating system, the formula for distributing allowances remains constant, but the inputs to that formula are updated over time. For example, an updating output-based allocation would update on a regular basis the portion of state load (and verified energy savings) that each retail provider supplies, so that allowance distributions are based on the latest available information. Similarly, an updating per-customer allocation would regularly update the number of customers each retail provider serves and base each allowance distribution on the latest percentages. Updating avoids providing an advantage to incumbents, and is one way to enable new market entrants to acquire allowances. Updating also adjusts the system over time to address changes that are unrelated to actions to reduce (or increase) GHG emissions, such as load migration.

### Other

Another allocation approach that should be considered is per-capita or per-customer allocation. A per capita allocation is arguably the most equitable allocation method, since allowances represent a public asset that belongs to all of us, and we are each entitled to equal use of the public asset. However, the number of people that each retail provider serves may be difficult to determine and verify. The number of customers each retail provider serves is already known and could serve as a close proxy. A per-customer allocation would implicitly allow each customer to emit an equal amount of GHGs, and would avoid the pitfalls of grandfathering or an output-based approach that is unadjusted for energy efficiency since a per-customer automatically rewards improvements in energy efficiency. In addition, a per-customer allocation

is a progressive way to distribute the value of the allowances, providing more benefit to lower-income customers than other distribution methods.<sup>3</sup> (Of course, the CPUC and local utility governing boards would need to ensure that each utility uses its per-customer allocation in a progressive manner to fully realize this benefit.)

***11. Should the method for allocating emission allowances remain consistent from one year to the next, or should it change as the program is implemented?***

The method for allocating allowances should be determined up front, so that all parties know what to expect and can plan ahead to reduce emissions or acquire allowances. (Of course, in an updating allocation system, the methodology would be determined up front, while the inputs would be updated over time.) However, changes to the allocation method may be warranted if the method is found to result in unforeseen adverse consequences, or if it otherwise fails to meet the evaluation criteria described above. Such a determination should be made by CARB or by an independent advisory committee appointed by CARB, and should be the result of a public process that includes an extensive review of the experience of the emissions allowance program.

***12. If new market entrants receive emission allowance allocations, how would the proper level of allocations be determined for them?***

In general, new entrants should be treated on equal footing as incumbent entities. The allowance allocation method should be competitively neutral; in other words, it should not create perverse incentives for firms to either enter or exit the market. If new market entrants receive an allocation, rather than buying allowances through an auction, an updating per-customer allocation system or an updating output-based system (adjusted for verified energy savings) would enable CARB to determine how many allowances the new entrant should receive.

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<sup>3</sup> Congressional Budget Office, *Trade-Offs in Allocating Allowances for CO2 Emissions*, Economic and Budget Issue Brief, April 25, 2007.



***13. If emission allowances are allocated based on load/sales, population, or other factors that change over time, how often should the allowance allocations be updated?***

The allowance allocations should be updated regularly, on a pre-determined schedule, on the same schedule that the state sets for distributing allowances. If allowances are distributed annually, the allowance allocation should also be updated on an annual basis.

***14. If emission allowances are allocated based on historical emissions (“grandfathering”) or benchmarking, what base year(s) should be used as the basis for those allocations?***

As explained above, NRDC/UCS do not support allocating allowances based on historical emissions. For the output-based benchmarking allocation, NRDC/UCS recommend the use of a multi-year average of load, adjusted for verified energy savings, as the baseline for allowance allocation. The use of a multi-year average would serve to normalize output fluctuations due to weather, hydro conditions, and other exogenous factors. As we discussed above, we support an updating mechanism, so the multi-year average should be updated for each distribution of allowances.

***15. If emission allowances are allocated based initially on historical emissions (“grandfathering”), should the importance of historical emissions in the calculation of allowances be reduced in subsequent years as providers respond to the need to reduce GHGs? If so, how should this be accomplished? By 2020, should all allocations be independent of pre-2012 historical emissions?***

NRDC/UCS oppose grandfathering of allowances, for the reasons stated above. If allowances are grandfathered, the importance of historical emissions in the calculation of allowances should be reduced in subsequent years as quickly as possible in favor of performance-based methods such as benchmarking or a per-customer allocation. In other words, allocations to entities with relatively high historical emissions should decrease more rapidly over the AB 32 implementation period than allocations to entities with relatively low historical emissions.

By 2020, if not well before, allocations should be entirely independent of historical emissions.

***16. Should a two-track system be created, with different emission allowances for deliverers/first sellers or retail providers with legacy coal-fueled power plants or legacy coal contracts? What are the factors and trade-offs in making this decision? How would the two tracks be determined, e.g., using an historical system emissions factor as the cut-off? How should the allocations differ between the tracks, both initially and over time? What would be the market impact and cost consequences to consumers if a two-track method were used?***

NRDC/UCS strongly oppose the creation of a two-track system of allowance allocation. The use of such a system would imply that entities with financial commitments to the highest-emitting resources deserve special treatment. However, AB 32 contains no provisions that imply that such preferential treatment is desirable or necessary. Moreover, the utility sector has known for at least 15 years that such high-emitting resources were financially risky, and the state should not now shield the entities that took the risk at the expense of their customers. A two-track system would also greatly add to the complexity and contentiousness of an allowance allocation program.

***17. If emission allowances are allocated administratively to retail providers, should other adjustments be made to reflect a retail provider's unique circumstances? Comment on the following examples, and add others as appropriate:***

- a. Climate zone weighting to account for higher energy use by customers in inclement climates, and***
- b. Increased emission allowances if there is a greater-than-average proportion of economically disadvantaged customers in a retail provider's area.***

Adjustments to administrative allocation methods depend on the specific allocation method under discussion. NRDC/UCS, for the reasons described elsewhere in these comments, support distributing allowances on either an output-based benchmarking basis (adjusted for verified energy savings) or per-customer basis to meet the principles discussed in Q1. We do not support grandfathering because it fails to meet these principles. We urge the Commissions to keep the distribution mechanism as simple as possible. Any administrative allocation of allowances should avoid making adjustments like those described above, unless there is compelling evidence that some retail providers vary so substantially from the rest that the added complexity is warranted.

***18. Should differing levels of regulatory mandates among retail providers (e.g., for renewable portfolio standards, energy efficiency investment, etc.) be taken into account in determining entity-specific emission allowance allocations going forward? For example, should emission allowance allocations be adjusted for retail providers with high historical investments in energy efficiency or renewables due to regulatory mandates? If those differential mandates persist in the future, should they continue to affect emission allowance allocations?***

As we discussed above, under an output-based benchmarking allocation, adjustments should be made for both historical and future verified energy efficiency savings.

***19. How often should the allowance allocation process occur? How far in advance of the compliance period?***

Allocations should occur far enough in advance of the compliance period to provide the regulated entities certainty and time to plan for compliance.

***20. What are the distributional consequences of your recommended emission allowance allocation approach? For example, how would your method affect customers of retail providers with widely differing average emission rates? Or differing rates of population growth?***

Both a per-customer and output-based (adjusted for verified energy savings) allowance allocation system would provide relatively more allowances to customers of retail providers with cleaner systems. An auction in which utilities are allowed to keep a portion of the amount they spend in the auction to invest in specified ways, subject to oversight and verification that the investments meet appropriate criteria, would require higher-emitting utilities to invest more money to reduce their emissions than lower-emitting utilities.

### **3.4.2. Emission Allowances with a Deliverer/First Seller Point of Regulation**

***21. Would a deliverer/first seller point of regulation necessitate auctioning of emission allowances to the deliverers/first sellers?***

Yes, it would be preferable to auction allowances under a first-seller approach. Allowances should not be allocated free of charge to first sellers.

Since many first-sellers are private companies that are economically unregulated, giving allowances away for free to the first sellers would provide windfall profits to first sellers at the

expense of consumers. This is because these first sellers will raise their prices to reflect the “opportunity cost” of allowances, passing that cost onto consumers, even if they receive allowances for free. In addition, allocating allowances to first sellers would require identifying all of the potential first sellers and their output baselines in advance of allocation, which would be extraordinarily difficult if not practically impossible.

However, as we noted above, allowances could also be allocated to retail providers under a first-seller approach and yield the same end result as auctioning the allowances and distributing the revenues to retail providers as trustees on behalf of their customers. That said, NRDC/UCS believe auctions provide a more transparent means to distribute the value of the allowances.

***22. Are there interstate commerce concerns if auction proceeds are obtained from all deliverers/first sellers and spent solely for the benefit of California ratepayers? If there are legal considerations, include a detailed analysis and appropriate legal citations.***

There may be legal concerns under *West Lynn Creamery, Inc. v. Healy*, 512 U.S. 186 (1994). However, if auction proceeds are being used to benefit California consumers, not California electricity suppliers, then California should not run afoul of the dormant commerce clause.

In *West Lynn Creamery*, Massachusetts had assessed a fee on all milk sales in the state, including milk sold by entities outside the state, and then used the proceeds to subsidize in-state farmers. The Department of Food and Agriculture Commissioner went so far as to state “we must act on the state level to preserve our local industry”. *Id.* at 190. The Court held that the Massachusetts scheme was “clearly unconstitutional” because its “avowed purpose and effect” was to “enable higher cost Massachusetts dairy farmers to compete with lower cost dairy farmers in other states.” *Id.* at 194. The salient question was not whether the fees were being used in the state of Massachusetts, because any fee levied by a state will be used in the state. Rather, the question was whether the state was using the scheme to advantage an in-state industry, compared to its out-of-state competitors.

By creating an auction and using the revenue to benefit California billpayers, California would not be advantaging in-state electricity sellers, compared to their out-of-state competitors. California must be careful to ensure that this is true, and that it is not using the revenue in a way that will ultimately benefit in-state sellers to the disadvantage of out-of-state sellers. A

California scheme would only be analogous to West Lynn Creamery if California were to use auction revenue from out-of-state power sellers to subsidize failing in-state power sellers so that they would have a competitive advantage against out-of-state sellers paying money into the auction. If, instead, California uses auction revenue from all power sellers to benefit California utility customers, it will be treating in-state and out-of-state sellers even-handedly, and will not run afoul of the dormant commerce clause.

***23. If you believe 100% auctioning to deliverers/first sellers is not required, explain how emission allowances would be allocated to deliverers/first sellers. In doing so, answer the following:***

NRDC/UCS believe that allowances should not be allocated for free to deliverers/first-sellers.

***24. With a deliverer/first seller point of regulation, should administrative allocations of emission allowances be made to retail providers for subsequent auctioning to deliverers/first sellers? If so, using what allocation method? Refer to your answers in Section 3.4.1., as appropriate.***

Since distributing auction revenue and distributing allowances yields effectively the same result, NRDC/UCS believe that the same approaches discussed above to distribute allowances could be applied under a first seller point of regulation. However, any such approach would need to address competitiveness concerns to ensure that retail providers that are also deliverer/first-sellers do not gain a competitive advantage using this approach. NRDC/UCS believe that it would be preferable to auction allowances from the start under a first-seller approach.

***25. If you recommend allocation of emission allowances to retail providers followed by an auction to deliverers/first sellers, how would such an auction be administered? What kinds of issues would such a system raise? What would be the impact on market performance, prices, and costs to customers?***

### 3.5. Natural Gas Sector

***26. Answer each of the questions in Section 3.4.1. except Q16, but for the natural gas sector and with reference to natural gas distribution companies (investor- or publicly-owned), interstate pipeline companies, or natural gas storage companies as appropriate. Explain if your answer differs among these types of natural gas entities. Explain any differences between your answers for the electricity sector and the natural gas sector.***

NRDC/UCS believe that the same principles and allowance distribution methods discussed above for the electricity sector should be applied when considering allowance distribution for the natural gas sector. Our recommendations discussed herein in the context of a load-based point of regulation for the electricity sector are also relevant to the natural gas sector.

***27. Are there any other factors unique to the natural gas sector that have not been captured in the questions above? If so, describe the issues and your recommendations.***

### 3.6. Overall Recommendation

***28. Considering your responses above, summarize your primary recommendation for how the State should design a system whereby electricity and natural gas entities obtain emission allowances if a cap and trade system is adopted.***

NRDC/UCS believe the state's paramount consideration should be to ensure that allowances are distributed in the public interest and to further the goals of AB 32. This is essential both for the design of California's own system, and to set an effective precedent for a national system that will benefit all of California's utility customers. NRDC/UCS generally prefer auctioning 100% of allowances and using the proceeds to further the goals of AB 32 and to benefit consumers. Allowances should not be "grandfathered," that is, given away for free to emitters based on historical or current emissions, because it does not meet any of the principles listed above.

We believe there are several methods by which allowances could be distributed that would meet the overarching principle of serving the public interest, as well as the longer list of criteria described above. We look forward to discussing various proposals with parties, and we offer the following three proposals to represent the types of systems that we could support. (We

expect that there are also other structures that could meet our criteria and that we would also support.)

### **1. Full auction with revenues distributed to public purposes**

For both electricity (under either point of regulation) and natural gas, one system that meets the principles expressed above is to auction all allowances, and to use the auction revenues for public purposes including:

- ◆ Support investments in, and deployment of, technologies to reduce GHG emissions;
- ◆ Reduce costs to consumers, particularly low-income consumers, for example through investments in end-use efficiency beyond the state's existing programs (in particular, some auction revenues could be used to help supplement existing funding for low-income energy efficiency and bill assistance programs);
- ◆ Invest in RD&D of new technologies to reduce GHG emissions;
- ◆ Support air and toxic pollution reduction efforts and enforcement programs, particularly in environmental justice communities;
- ◆ Support development of "green collar" jobs; and
- ◆ Provide economic opportunities to low-income and disadvantaged communities, as well as small businesses, schools, affordable housing associations, and other community institutions.

A full auction is preferable especially under a first-seller point of regulation to ensure that windfall profits are avoided.

### **2. Auction with partial utility-directed investments**

Under a load-based point of regulation for electricity and/or natural gas, another system that meets the principles expressed above is to auction all allowances, but to allow to utilities to keep a portion of the amount they spend in the auction to invest in specified ways, subject to oversight and verification that the investments meet appropriate criteria. For example, utilities could use the funds that would have otherwise gone into the state's overall auction revenue to make long-term investments in greenhouse gas reduction measures, to invest in RD&D, and to lower costs for low-income customers. The remaining auction revenue would be invested in the remaining areas described in option #1, above.

### 3. Per-customer allocation

For both electricity (under either point of regulation) and natural gas, another option would be to distribute a portion of the allowances to utilities using an updating per-customer allocation methodology. This would yield the same outcome as auctioning the allowances and distributing a portion of the revenues to each utility customer through their utility. (This is consistent with the principle that allowances represent a public asset that belongs to all of us, and we are each entitled to equal use of the public asset.) The remaining portion of the allowances should be auctioned, as described in option #1, above.

### III. Conclusion

NRDC and UCS commend the Commissions for carefully examining the issues surrounding the recommendation of an appropriate allowance allocation scheme. NRDC and UCS look forward to discussing these comments with other parties at the November 5, 2007 workshop.

Dated: October 31, 2007

Respectfully submitted,



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## CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the **“Opening Comments of the Natural Resources Defense Council (NRDC) and Union of Concerned Scientists (UCS) on Allowance Allocation Issues” in the matter of R.06-04-009** to all known parties of record in this proceeding by delivering a copy via email or by mailing a copy properly addressed with first class postage prepaid.

Executed on October 31, 2007 at San Francisco, California.



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